ALTER BLDG. 2855 FOR TEMPORARY AGE SHOP

ELECTRICAL PLAN NOTES
Drawing Sheet #3

3 September 2003

THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.

1. New 12' x 18' Office.

2. New 12' x 24' Tool Crib.

3. New Electrical Service to the building. The contractor shall install and wire the Virginia Power furnished Current Transformer Cabinet and Meter Base in accordance with Virginia Power requirements and instructions. The contractor shall fabricate and erect a steel frame using 2" x 3" x 3/8" steel angles for mounting the Current Transformer Cabinet and Meter Base. Embed the legs of the frame in concrete footings. Paint the steel frame with not less than 2 coats of rust preventative paint; color light gray. The steel frame should be similar to the existing frame on the west side of Bldg. 2749. Install a rigid conduit up the outside of the building to the height required by Virginia Power. Install a Weatherhead at the end of the conduit. Use unistrut or comparable material for mounting and securing the conduit. Run wires up the conduit from the Current Transformer Cabinet. Leave enough wire coiled and secured outside of the Weatherhead for Virginia Power to make their connection. The contractor shall coordinate with Virginia Power to ensure that the wires in the conduit up to the Weatherhead are the proper size and type. Install an anchoring eye on the building for Virginia Power to attach their wire support cable to. Securely attach the anchoring eye to the building's structural framing on the inside of the building.

4. New Circuit Breaker Panel. Install and wire a new 200 amp, 208 volt, 3 phase circuit breaker panel with a main breaker and not less than 42 circuit breaker spaces. Install the panel 5' south of the steel column in the northwest corner of the building. Use 1-5/8" unistrut or comparable material to construct a frame for mounting and securing the new Circuit Breaker Panel. Run rigid conduit and wires from the Current Transformer Cabinet through the existing metal siding to the new Circuit Breaker Panel. Apply Sealant to both sides of the metal siding and conduit to seal the hole and make the opening waterproof.

5. Existing 100 amp, 208 volt, single phase circuit breaker panel and Virginia Power meter. Install a 100 amp single pole circuit breaker in the New Circuit Breaker Panel, run conduit and wiring to the existing panel and wire the existing panel so that it is powered off of the new panel. Use unistrut or comparable material for mounting and securing the conduit. Disconnect the existing panel from the Virginia Power meter leaving the remaining wires in a safe condition.

6. Existing 110 volt duplex outlets. Rewire the outlets, run new conduit and wire, as required, and install new circuit breakers, as required, to power the existing outlets off of the new Circuit Breaker Panel. Use unistrut or comparable material for mounting and securing the conduit. Remove abandoned wires and conduits back to the nearest junction box. Leave the remaining wires in a safe condition.

7. New 110 volt Duplex Outlets mounted on the building's structural members with the outlet boxes and conduits exposed. Run new conduit and wire, as required, and install new circuit breakers, as required, to power the New Outlets off of the new Circuit Breaker Panel. Use unistrut or comparable material for mounting and securing the conduit. The New Outlets should be similar to the existing outlets with metal boxes and metal outlet covers.

8. Location of future telephone and LAN equipment.

9. New 110 volt Duplex Outlet with outlet box and conduit recessed in the steel stud and wallboard wall. Outlet cover plate is to be Ivory colored plastic. Run new conduit and wire, as required, up inside the office wall and then along the building wall or across the under side of the roof to the new circuit breaker panel. Use unistrut or comparable material for mounting and securing the conduit. Install new circuit breakers, as required, to power the New Outlets off of the new Circuit Breaker Panel. Electrical outlets in the office, tool crib and on the existing wire partition should not be the same breakers as the outlets in the shop.

10. New 220 volt Outlet for the Thru-the-Wall Heat Pump. The outlet box and conduit are to be recessed in the steel stud and wallboard wall. Outlet cover plate is to be Ivory colored plastic. Run new conduit and wire, as required, up inside the office wall and then along the building wall or across the under side of the roof to the new circuit breaker panel. Use unistrut or comparable material for mounting and securing the conduit. Install a new circuit breaker in the new Circuit Breaker Panel to power the heat pump. The contractor shall coordinate with the Thru-the-Wall Heat Pump supplier to ensure that the correct size wires, conduit and circuit breaker are installed for the heat pump.

11. New 110 volt Duplex Outlets and Telephone Boxes with outlet boxes and conduits recessed in the steel stud and wallboard wall. The Electrical Outlet Cover Plates are to be Ivory colored plastic. Install Ivory colored plastic blank cover plates on the Telephone Boxes. Run the new electrical conduits and wire, as required, from the duplex outlets, up inside the office walls and then along the building wall or across the under side of the roof to the new circuit breaker panel. Install 2 each, 4" square junction boxes in the conduit runs in the area above the office ceiling for future use. Use unistrut or comparable material for mounting and securing the conduit. Install new circuit breakers, as required, to power the New Outlets off of the new Circuit Breaker Panel. Electrical outlets in the office, tool crib and on the existing wire partition should not be the same breakers as the outlets in the shop. Run ¾" conduits with #12 pull wires up inside the office walls from the Telephone Boxes and then over to the northwest corner of the office. Extend the conduits down to 3" below the suspended ceiling. Use wide sweep elbows

to make turns. Install plastic bushings on the ends of the conduits to protect the future telephone wires.

12. New 110 volt Duplex Outlets and Telephone Boxes mounted on the existing wire partition with the outlet boxes and conduits exposed. The New Duplex Outlets should be similar to the existing outlets in metal boxes with metal outlet covers. The New Telephone Boxes are to be metal outlet boxes with blank metal covers. Run new electrical conduit and wire, as required, from the duplex outlets, up and along the wire partition and then along the building wall or across the under side of the roof to the new circuit breaker panel. Install new circuit breakers, as required, to power the New Outlets off of the new Circuit Breaker Panel. Electrical outlets in the office, tool crib and on the existing wire partition should not be the same breakers as the outlets in the shop. Run ¾" conduits with #12 pull wires from the Telephone Boxes, up and along the wire partition and then over to the northwest corner of the office. Extend the conduits down to 3" below the suspended ceiling. Use wide sweep elbows to make turns. Install plastic bushings on the ends of the conduits to protect the future telephone wires. Use unistrut or comparable material for mounting and securing the conduit.

13. Two (2) New Telephone Boxes. Use unistrut or comparable material to construct a frame for mounting and securing the new Telephone Boxes and conduits with the boxes and conduits exposed. The New Telephone Boxes are to be metal outlet boxes with blank metal covers. Run ¾" conduits with #12 pull wires from the Telephone Boxes, up and along the building wall over to the northwest corner of the office. Extend the conduits down to 3" below the suspended ceiling. Use wide sweep elbows to make turns. Install plastic bushings on the ends of the conduits to protect the future telephone wires.

14. New Infrared Heat Burners. Run conduit and wires from the new circuit breaker panel up the building wall and across the under side of the roof to the new Burners to power the fan and controls. Use unistrut or comparable material for mounting and securing the conduit. Install circuit breakers in the new panel, as required, to power the New Infrared Heat Burners. The contractor shall coordinate with the Infrared Heater supplier to ensure that the correct size wires, conduit and circuit breakers are installed for the burners.

15. New Telephone Service Entrance. Use a 2-1/2" diameter, rigid conduit wide sweep 90 deg. elbow underground to transition from flexible plastic pipe to rigid conduit. Extend the 2-1/2" rigid conduit up the side of the building to a new 6" x 6"x 24" metal pull box with screw attached cover near the roofline. Extend the #12 pull wire up into the box. Use unistrut or comparable material for mounting and securing the conduit and box. Paint the rigid conduit and box with not less than 2 coats of rust preventative paint; dark bronze color. Run a 2-1/2" rigid conduit, with #12 pull wire, from the pull box through the existing metal siding into the building. Apply Sealant to both sides of the metal siding and around the conduit to seal the hole and make the opening waterproof. Transition from rigid conduit to 2-1/2" diameter EMT conduit. Run the EMT conduit, with #12 pull wire, along the building wall and across the under side of the roof to the northwest corner of the office. Use unistrut or comparable material for mounting

and securing the conduit. Extend the conduit down to 3" below the suspended ceiling. Use wide sweep elbows to make turns. Install a plastic bushing on the end of the conduit to protect the future telephone wires.